



GVPM Track & Suspension Overview

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Track & Suspension

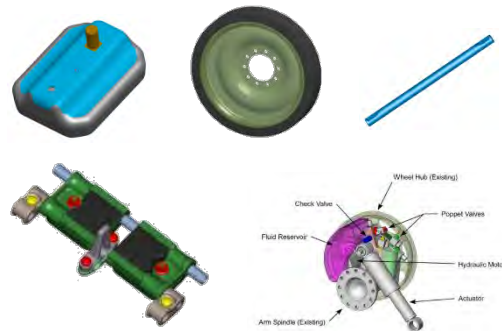
GVSETS
GROUND VEHICLE SYSTEMS ENGINEERING AND TECHNOLOGY SYMPOSIUM

Challenges we have:

- Delivering lightweight, survivable, durable track systems with common architectures
- Modular advanced suspension systems, with energy regeneration, and Electronic Stability Control
- Durable, fire resistant elastomer components

Solutions we are investigating:

Reduce running gear system level weights,
reduce rolling resistance of track



Improve platform stability and
mobility across all terrain conditions



Utilize Elastomer Improvement
Laboratory to formulate and test
advanced track materials



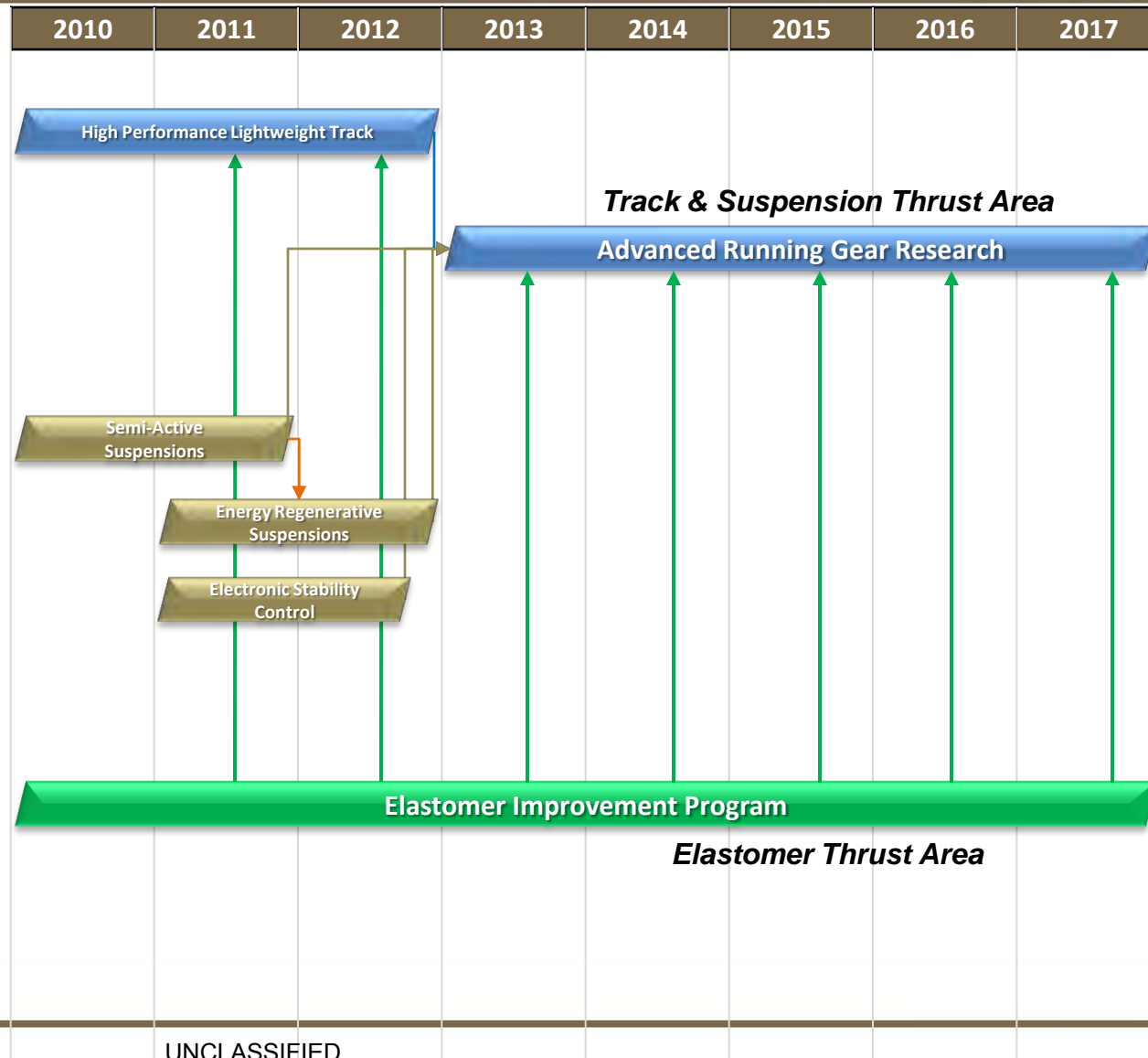
Where we need your help:

- Identify opportunities to reduce track system weight, reduce rolling resistance, and optimize presently fielded designs for commonality
- Increase efficiencies of energy regenerative suspensions, and integrate advanced preview sensing to suspension control algorithms
- Develop fire resistant, durable elastomers, advance the integration of nano materials in elastomer formulations

Projects Current & Future

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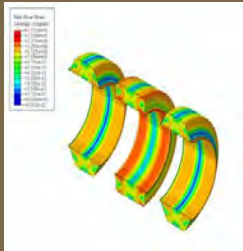
- Reduce track system weight, increase off-road stability and performance
- Develop common track architectures, reduce rolling resistance, increase platform agility, stability and mobility
- Increase track system durability and fire resistance



Laboratory Capability Current & Future

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Current Capability



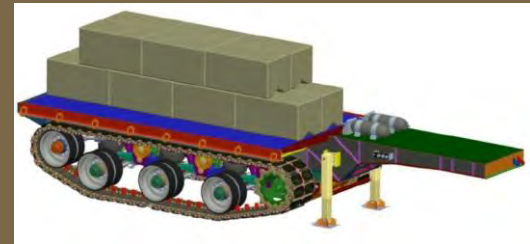
• EIP Laboratory

- Characterization / Performance Testing
- Life Cycle Testing
- Failure Analysis

EIP
Elastomer Improvement
Program

**Elastomer
Roadmap**

Future Capability



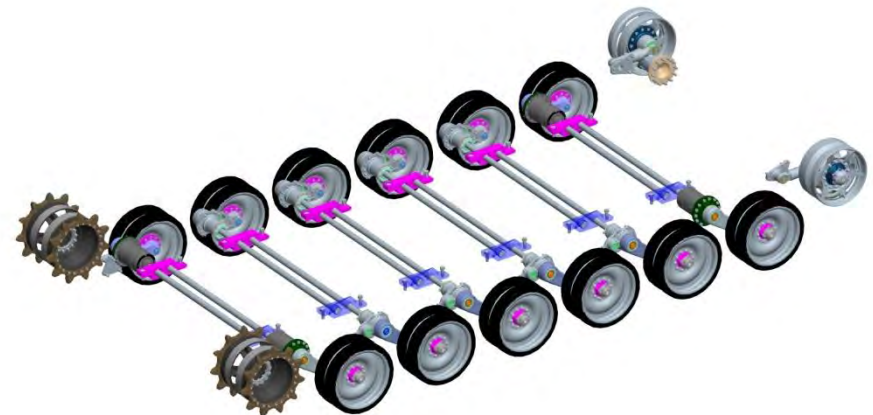
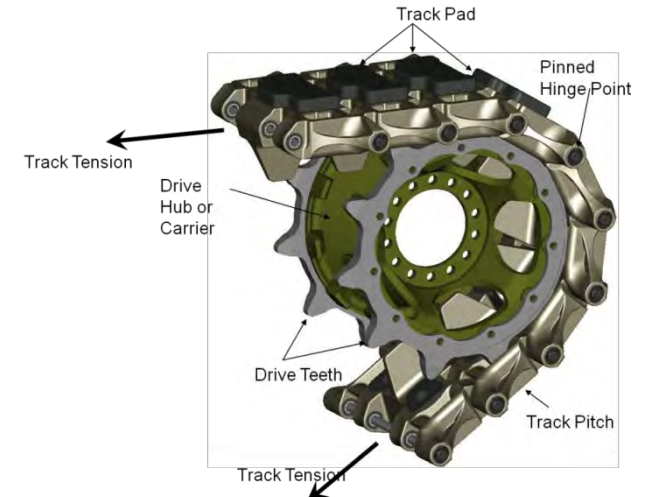
• EIP Laboratory +

- Full Pitch Test Machine
- Trailer Test Rig
- Elastomer Material Formulation
- Material → Component → System Testing

Track & Suspension Technology Thrusts

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FOCUS ON THE SYSTEM



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